

REMARKS

This is in response to the Office Action mailed on June 11, 2009 for the above-referenced application. Claims 28 to 38 remain pending for examination. Applicant respectfully requests reconsideration of the pending claims in view of the remarks contained herein.

Terminal Disclaimer

The Examiner stated that a terminal disclaimer was required in view of U.S. Patent No. 6,292,662. Applicant maintains that no such terminal disclaimer is necessary in view of the pending claims. However, solely to advance prosecution, Applicant attaches herewith a terminal disclaimer in order to advance prosecution of the application. Accordingly, Applicant respectfully requests withdrawal of this rejection.

Discussion of Rejection under 35 USC § 103

The Examiner has now rejected Claims 28-38 as unpatentable over five references, namely Kotzin in view of Roach and (Widmark or Munk) and Baran (U.S. Patent 4,771,425). Applicant respectfully disagrees that the pending claims are obvious in view of all these references for the reasons discussed below.

In order for the Examiner to make a *prima facie* case of obviousness, each and every limitation of the claim must be found, directly or inherently, in the cited art. However, as discussed below, the Examiner has not found each and every element of the claims in the prior art. Thus, the Examiner has failed to make his *prima facie* case.

The Examiner argues that cellular systems began as analog systems and migrated to digital. The PSTN is analog and thus would require a "translation/conversion" when a wireless caller connects through a PSTN to a wired caller (*Final OA*, page 4). Applicant agrees, and points out that it is the problems associated with this required "translation/conversion" that Applicant's claimed invention solves.

Wireless callers communicate using vocoded data packets that travel from their handset to a base station. In the past, when a wireless caller needed to use the PSTN to communicate with a land-based subscriber, the vocoded data packets were de-vocoded at the

base station to extract the voice content of the vocoded data packets. The extracted voice content was then transmitted as modulated voice data through the PSTN (*spec.* para. [1005]). This de-vocoding was done because the PSTN isn't a packet switched network and therefore wasn't designed to transmit vocoded data packets from one subscriber to another. Similarly, if the wireless caller was communicating with another wireless caller through a PSTN, the vocoded data packets from the first caller would be de-vocoded to extract the voice information. That voice information would be transformed into modulated voice data for transmission across the PSTN, and then re-vocoded into vocoder data packets at the recipient's base station for transmission to the destination wireless subscriber (*spec.* para [1006]). This "double vocoding" led to degraded voice quality between two wireless subscribers communicating across a non-packet switched network.

As the Examiner points out, the technology continued to advance as communication networks advanced from PSTN to packet switched networks (*Final OA*, page 4). However, many calls from one wireless subscriber to another are still routed through non-packet switched networks wherein the vocoded data from the first caller is de-vocoded, transmitted across the network, re-vocoded and then transmitted to the destination wireless subscriber. It is this double vocoding problem that Applicant's claimed invention solves. And the solution relates to transmitting vocoder data packets themselves, in a pulse code modulated (PCM) format, across the non-packet switched network. Unlike prior systems, the claimed methods and systems do not extract voice data from the vocoded data packets in order to modulate and transmit the voice data across a non-packet switched network.

Claims 28-38 recites a method, apparatus or memory for processing a telephone call from a first subscriber unit that is part of a first wireless telephone system. The method includes routing vocoded data packets from a first wireless subscriber unit to a second subscriber unit if the second subscriber is connected through a digital packet based network. Thus, if the first wireless subscriber and the second subscriber are connected by a digital packet network, there is no reason to translate or convert the vocoded data packets, they are just transferred directly to the second subscriber. However, the method includes *converting vocoded data packets* into a pulse code modulated (PCM) format and *routing the PCM formatted packets* through a wire-based telephone system to the second subscriber unit if

the second subscriber unit is not connected through a digital packet switched network. *Thus, the system does not extract the voice data from the vocoded data packets coming from the first wireless subscriber.* Nor does the system re-vocode the data once it reaches the second subscriber. The PCM formatted vocoder data packets are converted back into the original vocoded data packets by the target wireless telephone system. There is no extraction of voice information. No de-vocoding and re-vocoding occurs, such as taught in the prior art. The vocoder data packets themselves are converted into a PCM format and sent across the non-digital packet network. These converted vocoder data packets are then reconstructed back into their original form at the destination site by a wireless system. As is known, many wireless systems are compatible with one another and thus vocoded data packets from one wireless subscriber can be directly transferred to a second wireless subscriber.

Thus, the present system and the prior art systems differ at least by the fact that the claimed system sends PCM formatted vocoder data packets across non-digital packet switched networks. This is not disclosed in Baran, or any of the other art cited by the Examiner. Each of these systems is either silent about how they send wireless data across a non-packet switched network, or specifically note that the vocoded packets are de-vocoded before introduction into the non-packet switched network.

In addition, Claims 28-38 recite that the PCM formatted packets are converted back into the vocoded data packets by a second wireless telephone system. At least this feature is not shown by Baran, or any of the other art cited by the Examiner. These prior systems re-vocoded the extracted voice data that is communicated across the non-packet switched network, and did not convert PCM formatted vocoder data packets back into their original vocoder data packets.

The Examiner points to Roach as teaching a wireless digital network whereby conversion is performed to route calls between wired and wireless users, including the use of vocoders. Applicant agrees, but argues that nothing in Roach teaches the claimed transmission of PCM formatted vocoder data packets. In fact, Roach specifically mentions that FIG. 2 illustrates that the components of the Intelligent Cellular Site (ICS) 110 generally converts voice signals from the subscriber to a protocol that a conventional

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Mobile Switching Center (MSC) understands. The conventional switching center would understand modulated voice data, which is typically sent across non-packet switched networks, and not PCM formatted vocoder data packets.

Accordingly, the combination of Kotzin in view of Roach and (Widmark or Munk) and Baran do not teach each and every element of the claims. For this reason, Applicant respectfully requests withdrawal of this rejection.

CONCLUSION

In view of the foregoing, Applicant submits that all pending claims in the application are patentable. Accordingly, reconsideration and allowance of this application are earnestly solicited. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Respectfully submitted,

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By: 
Anthony P. Mauro II
Reg. No. 63,702
Tel. No. 858-658-5698

QUALCOMM Incorporated
Attention: Patent Department
5775 Morehouse Drive
San Diego, California 92121
Telephone: (858) 658-5698
Facsimile: (858) 658-2502